

47

Notice of Allowability

Application No.

09/997,768

Examiner

Akash Saxena

Applicant(s)

GABELE ET AL.

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 17th May 2005.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ The drawings filed on 30 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 08/12/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

DETAILED ACTION

1. Claims 1-21 have been presented for examination based on the amendment filed on 17th May 2005 and subsequent amendment faxed to examiner on 11th August 2005.
2. Second amendment to the claims faxed to the office on 11th August 2005 will be scanned in with this Allowance and is examined below.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Matt Baca on 17th August 2005.

The claims 1-21 are amended as follows from the last amendment faxed in on 12th August 2005 and are final agreed (by Mr. Baca) version of the claims.

Regarding Claim 1

In claim 1, line 1 before the term "method" please **insert** the term – *computer implemented* –; in line 4 before the term "simulation client" please **delete** the term – *the* – and **insert** the term – *a* –; In line 14 before the term "model" please **delete** the term – *simulation* –.

1. (Currently Amended) A **computer implemented** method for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to **[[the]] a** simulation client, said method comprising:
- simulation testing the HDL model using a simulation client within said simulation batch farm, said simulation testing including:
 - utilizing an instrumentation entity to detect instrumentation events; and
 - delivering signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;
 - assembling an instrumentation event disable list within said instrumentation server, wherein said instrumentation event disable list lists instrumentation events to be disabled within said HDL **[[simulation]]** model; and
 - prior to simulating said HDL model within said simulation client:

Art Unit: 2128

retrieving said instrumentation event disable list from said instrumentation server; and
disabling monitoring of instrumentation events specified by said instrumentation event disable list.

Final version of the claim 1 should now read as follows:

1. *A computer implemented method for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to a simulation client, said method comprising:
simulation testing the HDL model using a simulation client within said simulation batch farm, said simulation testing including:
utilizing an instrumentation entity to detect instrumentation events; and
delivering signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;
assembling an instrumentation event disable list within said instrumentation server, wherein said instrumentation event disable list lists instrumentation events to be disabled within said HDL model; and
prior to simulating said HDL model within said simulation client:
retrieving said instrumentation event disable list from said instrumentation server; and
disabling monitoring of instrumentation events specified by said instrumentation event disable list.*

Regarding Claim 2

In claim 2, line 4 before the term "model" please **delete** – *simulation*– and **insert** –

HDL –; In line 6 before the term "within said" please **insert** –, *to be added* –.

2. (**[[Original]] Currently Amended**) The method of claim 1, wherein said assembling an instrumentation event disable list comprises:
identifying an instrumentation event to be disabled during simulation processing of said **[[simulation]] HDL** model; and
delivering to said instrumentation server an instrumentation event name corresponding to said instrumentation event, **to be added** within said instrumentation event disable list.

Art Unit: 2128

Final version of the claim 2 should now read as follows:

2. *The method of claim 1, wherein said assembling an instrumentation event disable list comprises:
identifying an instrumentation event to be disabled during simulation processing of said HDL model; and
delivering to said instrumentation server an instrumentation event name corresponding to said instrumentation event, to be added within said instrumentation event disable list.*

Regarding Claim 3

In claim 3, line 5 before the term "model" please **delete** the term ~~–simulation–~~ and **insert** the term ~~–HDL–~~.

3. **(~~[[Original]]~~ Currently Amended)** The method of claim 2, further comprising, in response to receiving said delivered instrumentation event name at said instrumentation server, adding said instrumentation event name to a master disable file within said instrumentation server, wherein said master disable file contains a list of instrumentation events to be disabled for said **[[simulation]] HDL** model.

Final version of the claim 3 should now read as follows:

3. *The method of claim 2, further comprising, in response to receiving said delivered instrumentation event name at said instrumentation server, adding said instrumentation event name to a master disable file within said instrumentation server, wherein said master disable file contains a list of instrumentation events to be disabled for said HDL model.*

Regarding Claim 4

In claim 4, line 3 before the term "model" please **delete** the term ~~–simulation–~~ and **insert** the term ~~–HDL–~~; line 6 before the term "simulator" please **insert** the term ~~–model–~~.

4. **(~~[[Original]]~~ Currently Amended)** The method of claim 1, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said **[[simulation]] HDL** model within said model simulator, said retrieving said instrumentation event disable list comprising:

Art Unit: 2128

issuing a request from said run time executive program to an application program interface (API) entry point within said **model** simulator to retrieve said instrumentation event disable list;
responsive to said request to retrieve said instrumentation event disable list, attempting to access said instrumentation server; and
responsive to a successful access to said instrumentation server, delivering said master disable file to said simulation client.

Final version of the claim 4 should now read as follows:

4. *The method of claim 1, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said HDL model within said model simulator, said retrieving said instrumentation event disable list comprising:*
issuing a request from said run time executive program to an application program interface (API) entry point within said model simulator to retrieve said instrumentation event disable list;
responsive to said request to retrieve said instrumentation event disable list, attempting to access said instrumentation server; and
responsive to a successful access to said instrumentation server, delivering said master disable file to said simulation client.

Regarding Claim 5

Final un-amended version of the claim 5 should read as follows:

5. *The method of claim 4, wherein an alternate copy of said instrumentation event disable list is stored within a shared file system, said method further comprising, in response to an unsuccessful access attempt to instrumentation server, attempting to access said shared file system.*

Regarding Claim 6

Final un-amended version of the claim 6 should read as follows:

6. *The method of claim 5, wherein said alternate copy is periodically updated from said master disable file.*

Regarding Claim 7

In claim 7, line 4 before the term "simulation" please **delete** the term ~~the~~ and **insert** the term ~~a~~; in line 5 before the term "simulation client" please **delete** the term ~~a~~ and **insert** the term ~~said~~;

7. **(Currently Amended)** A system for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to ~~[[the]]~~ **a** simulation client, said system comprising:

[[a]] said simulation client within said simulation batch farm for simulation testing the HDL model;

an instrumentation entity that detects instrumentation events during said simulation testing and delivers signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;
processing means for assembling an instrumentation event disable list within said instrumentation server, wherein said instrumentation event disable list lists instrumentation events to be disabled within said HDL simulation model; and
processing means responsive to simulating said HDL model within said simulation client for:

retrieving said instrumentation event disable list from said instrumentation server; and

disabling monitoring of instrumentation events specified by said instrumentation event disable list.

Final version of the claim 7 should now read as follows:

7. *A system for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to a simulation client, said system comprising:*

said simulation client within said simulation batch farm for simulation testing the HDL model;

an instrumentation entity that detects instrumentation events during said simulation testing and delivers signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;

processing means for assembling an instrumentation event disable list within said instrumentation server, wherein said instrumentation event disable list lists instrumentation events to be disabled within said HDL simulation model; and

Art Unit: 2128

processing means responsive to simulating said HDL model within said simulation client for:
retrieving said instrumentation event disable list from said instrumentation server; and
disabling monitoring of instrumentation events specified by said instrumentation event disable list.

Regarding Claim 8

In claim 8, line 4 before the term "model" please **delete** the term *–simulation–* and **insert** the term *–HDL–*; in line 6-7 before the term "within said" please **insert** the term *–,to be added–*;

8. (**[[Original]] Currently Amended**) The system of claim 7, wherein said processing means for assembling an instrumentation event disable list comprises:
processing means for identifying an instrumentation event to be disabled during simulation processing of said **[[simulation]] HDL** model; and
processing means for delivering to said instrumentation server an instrumentation event name corresponding to said instrumentation event, **to be added** within said instrumentation event disable list.

Final version of the claim 8 should now read as follows:

8. *The system of claim 7, wherein said processing means for assembling an instrumentation event disable list comprises:*
processing means for identifying an instrumentation event to be disabled during simulation processing of said HDL model; and
processing means for delivering to said instrumentation server an instrumentation event name corresponding to said instrumentation event, to be added within said instrumentation event disable list.

Regarding Claim 9

In claim 9, line 5 before the term "model" please **delete** the term *–simulation–* and **insert** the term *–HDL–*.

9. (**[[Original]] Currently Amended**) The system of claim 8, further comprising,
processing means responsive to receiving said delivered instrumentation event name at said instrumentation server for adding said instrumentation event name to a master disable file within said instrumentation server, wherein said master disable

Art Unit: 2128

file contains a list of instrumentation events to be disabled for said **[[simulation]] HDL** model.

Final version of the claim 9 should now read as follows:

9. *The system of claim 8, further comprising, processing means responsive to receiving said delivered instrumentation event name at said instrumentation server for adding said instrumentation event name to a master disable file within said instrumentation server, wherein said master disable file contains a list of instrumentation events to be disabled for said HDL model.*

Regarding Claim 10

In claim 10, line 3 before the term "model" please **delete** the term *–simulation–* and **insert** the term *–HDL–*; line 7 before the term "simulator" please **insert** the term *– model –*.

10. (**[[Original]] Currently Amended**) The system of claim 7, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said **[[simulation]] HDL** model within said model simulator, said processing means for retrieving said instrumentation event disable list comprising:
- processing means for issuing a request from said run time executive program to an application program interface (API) entry point within said **model** simulator to retrieve said instrumentation event disable list;
 - processing means responsive to said request to retrieve said instrumentation event disable list, attempting to access said instrumentation server; and
 - processing means responsive to a successful access to said instrumentation server, delivering said master disable file to said simulation client.

Final version of the claim 10 should now read as follows:

10. *The system of claim 7, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said HDL model within said model simulator, said processing means for retrieving said instrumentation event disable list comprising:*
- processing means for issuing a request from said run time executive program to an application program interface (API) entry point within said model simulator to retrieve said instrumentation event disable list;*
 - processing means responsive to said request to retrieve said instrumentation event disable list, attempting to access said instrumentation server; and*

processing means responsive to a successful access to said instrumentation server, delivering said master disable file to said simulation client.

Regarding Claim 11

Final un-amended version of the claim 11 should read as follows:

11. The system of claim 10, wherein as alternate copy of said instrumentation event disable list is stored within a shared file system, said system further comprising, processing means responsive to an unsuccessful access attempt to instrumentation server for attempting to access said shared file system.

Regarding Claim 12

Final un-amended version of the claim 12 should read as follows:

12. The system of claim 11, wherein said alternate copy is periodically updated from said master disable file.

Regarding Claim 13

In claim 13, line 2 before the term "a data processing system" please **delete** the term ~~—/n—~~ and **insert** the term — A computer program product tangibly embodied in a computer-readable storage device on —; in line 2 after the term "a data processing system" please **delete** the terms — a computer-readable medium having encoding thereon — and **insert** the term —having—; in line 7 before the term "simulation client" please **delete** the term —the— and **insert** the term —a—; in line 9 before the term "a method comprising" please **delete** the terms ~~—computer executable instructions—~~ and **insert** the terms —computer program product, which when executed performs—; in line 10 before the term "simulation client" please **delete** the term ~~—a—~~ and **insert** the term ~~—said—~~; in line 18 before the term "model" please **delete** the term ~~—simulation—~~. Please also note the double indentation of some steps.

Art Unit: 2128

13. (Currently Amended) **A computer program product tangibly embodied in a computer-readable storage device on [[In]] a data processing system, [[a computer-readable medium having encoding thereon]] having** computer-executable instructions for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to **[[the]] a simulation client, said [[computer executable instructions performing]] computer program product, which when executed performs** a method comprising:
- simulation testing the HDL model using **[[a]] said** simulation client within said simulation batch farm, said simulation testing including:
 - utilizing an instrumentation entity to detect instrumentation events; and
 - delivering signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;
 - assembling an instrumentation event disable list within said instrumentation server, wherein said instrumentation event disable list lists instrumentation events to be disabled within said HDL **[[simulation]]** model; and
 - prior to simulating said HDL model within said simulation client:
 - retrieving said instrumentation event disable list from said instrumentation server; and
 - disabling monitoring of instrumentation events specified by said instrumentation event disable list.

Final version of the claim 13 should now read as follows:

13. *A computer program product tangibly embodied in a computer-readable storage device on a data processing system, having computer-executable instructions for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to a simulation client, said computer program product, which when executed performs a method comprising:*
- simulation testing the HDL model using said simulation client within said simulation batch farm, said simulation testing including:*
 - utilizing an instrumentation entity to detect instrumentation events; and*
 - delivering signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;*
 - assembling an instrumentation event disable list within said instrumentation server, wherein said instrumentation event disable list lists instrumentation events to be disabled within said HDL model; and*
 - prior to simulating said HDL model within said simulation client:*

*retrieving said instrumentation event disable list from said instrumentation server; and
disabling monitoring of instrumentation events specified by said instrumentation event disable list.*

Regarding Claim 14

In claim 14, line 2 before the term “for assembling” please **delete** the terms – *program instruction means*– and **insert** the terms –*computer-executable instructions* –; in line 4 before the term “identifying” please **delete** the terms – *program instruction means for*–; in line 6 before the term “delivering” please **delete** the terms – *program instruction means for*–.

14. (**Currently Amended**) The computer program product of claim 13, wherein said **computer-executable instructions** **[[program instruction means]]** for assembling an instrumentation event disable list comprises:
[[program instruction means for]] identifying an instrumentation event to be disabled during simulation processing of said simulation model; and
[[program instruction means for]] delivering to said instrumentation server an instrumentation event name corresponding to said instrumentation event within said instrumentation event disable list.

Final version of the claim 14 should now read as follows:

14. *The computer program product of claim 13, wherein said computer-executable instructions for assembling an instrumentation event disable list comprises:
identifying an instrumentation event to be disabled during simulation processing of said simulation model; and
delivering to said instrumentation server an instrumentation event name corresponding to said instrumentation event within said instrumentation event disable list.*

Regarding Claim 15

In claim 15, line 2 before the term “receiving said” please **delete** the terms – *program instruction means responsive to* – and **insert** the terms – *computer-executable instructions for*–.

Art Unit: 2128

15. **(Currently Amended)** The computer program product of claim 14, further comprising, said **[[program instruction means responsive to]] computer-executable instructions for** receiving said delivered instrumentation event name at said instrumentation server for adding said instrumentation event name to a master disable file within said instrumentation server, wherein said master disable file contains a list of instrumentation events to be disabled for said simulation model.

Final version of the claim 15 should now read as follows:

15. *The computer program product of claim 14, further comprising, said computer-executable instructions for receiving said delivered instrumentation event name at said instrumentation server for adding said instrumentation event name to a master disable file within said instrumentation server, wherein said master disable file contains a list of instrumentation events to be disabled for said simulation model.*

Regarding Claim 16

In claim 16, line 5 before the terms “for retrieving” please **delete** the terms – program instruction means– and **insert** the terms –*computer-executable instructions*–; in line 6 before the term “issuing” please **delete** the terms – *program instruction means for*–; in line 9 before the terms “responsive to” please **delete** the terms – *program instruction means*–; in line 10 before the terms “attempting” please **delete** the terms – *for*–; in line 12 before the terms “responsive to” please **delete** the terms – *program instruction means*–; in line 13 before the terms “delivering” please **delete** the terms – *for*–.

16. **(Currently Amended)** The computer program product of claim 13, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said simulation model within said model simulator, said **[[program instruction means]] computer-executable instructions** for retrieving said instrumentation event disable list comprising:
[[program instruction means for]] issuing a request from said run time executive program to an application program interface (API) entry point within said simulator to retrieve said instrumentation event disable list;

Art Unit: 2128

[[program instruction means]] responsive to said request to retrieve said instrumentation event disable list **[[for]]** attempting to access said instrumentation server; and
[[program instruction means]] responsive to a successful access to said instrumentation server **[[for]]** delivering said master disable file to said simulation client.

Final version of the claim 16 should now read as follows:

16. *The computer program product of claim 13, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said simulation model within said model simulator, said computer-executable instructions for retrieving said instrumentation event disable list comprising:*
issuing a request from said run time executive program to an application program interface (API) entry point within said simulator to retrieve said instrumentation event disable list;
responsive to said request to retrieve said instrumentation event disable list attempting to access said instrumentation server; and
responsive to a successful access to said instrumentation server delivering said master disable file to said simulation client.

Regarding Claim 17

Final un-amended version of the claim 17 should read as follows:

17. *The computer program product of claim 16, wherein an alternate copy of said instrumentation event disable list is stored within a shared file system, said computer program product further comprising, program instruction means responsive to an unsuccessful access attempt to instrumentation server for attempting to access said shared file system.*

Regarding Claim 18

Final un-amended version of the claim 18 should read as follows:

18. *The computer program product of claim 17, wherein said alternate copy is periodically updated from said master disable file.*

Regarding Claim 19

In claim 19, line 1 before the term "method" please **insert** the terms *–computer implemented–*; in line 4 before the term "simulation client" please **delete** the term *–* the– and **insert** the term *–a–*.

19. **(Currently Amended)** A **computer implemented** method for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to **[[the]] a** simulation client, said method comprising:
- simulation testing the HDL model using a simulation client within said simulation batch farm, said simulation testing including:
 - utilizing an instrumentation entity to detect instrumentation events; and
 - delivering signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;
 - maintaining, within said instrumentation server, an event disable list for each active HDL model within said simulation batch farm;
 - including within each event disable list, a list of instrumentation events to be disabled for a corresponding HDL model; and
 - prior to simulating said HDL model within said simulation client:
 - retrieving an event disable list corresponding to said HDL model from said instrumentation server; and
 - disabling monitoring of instrumentation events specified by said event disable list.

Final version of the claim 19 should now read as follows:

19. *A computer implemented method for disabling monitoring of an instrumentation event in a hardware description language (HDL) model of a circuit design within a batch simulation farm, said batch simulation farm including an instrumentation server communicatively coupled to a simulation client, said method comprising:*
- simulation testing the HDL model using a simulation client within said simulation batch farm, said simulation testing including:*
 - utilizing an instrumentation entity to detect instrumentation events; and*
 - delivering signals from the instrumentation entity to an instrumentation logic block indicating detected occurrences of the instrumentation events during simulation of said circuit design;*
 - maintaining, within said instrumentation server, an event disable list for each active HDL model within said simulation batch farm;*

Art Unit: 2128

*including within each event disable list, a list of instrumentation events to be disabled for a corresponding HDL model; and
prior to simulating said HDL model within said simulation client:
retrieving an. event disable list corresponding to said HDL model from said instrumentation server; and
disabling monitoring of instrumentation events specified by said event disable list.*

Regarding Claim 20

Final un-amended version of the claim 20 should read as follows:

20. The method of claim 19, wherein said disabling comprises setting, within said instrumentation logic block, event mask registers corresponding to instrumentation events included in said event disable list.

Regarding Claim 21

Final un-amended version of the claim 21 should read as follows:

21. The method of claim 20, wherein said simulation client includes a model simulator and a run time executive program for controlling simulation processing of said simulation model within said model simulator, wherein said setting event mask registers is performed using an application program interface entry point within said model simulator.

Response to Remarks on Claim Rejections - 35 USC § 103

4. Applicant's arguments & amendment filed on 5th May 2005 with respect to claims 1, 7, 13 and 19 have been fully considered and are persuasive. In light of the latest amendment submitted on 12th August 2005, 35 USC 103(a) rejections have been withdrawn and changes pertaining to minor 35 USC 112 issues are made with formal examiners' amendment above.

Allowable Subject Matter

5. Claims 1,6 and 9 have now been allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Applicants are disclosing a method, system and a computer program product for selectively & centrally disabling instrumentation events, through a instrumentation server in a batch simulation farm, for each HDL model being simulated in the batch simulation farm on a data processing system. The individual steps/components of simulating a HDL model, assembling a enable/disable list for an application, and retrieving the enable/disable list for debugging have been individually disclosed in prior art of record. Specifically, such features are generally available in commercial software products like HDL simulation tools from Synopsis, IBM microkernel loader and instrumentation server.

While these features are individually disclosed in the prior art, the prior art of record does not meet the conditions as suggested in MPEP section 2132, namely:

"The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d

1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an **ipsissimis verbis** test, i.e., identity of terminology is not required. **In re Bond**, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."

In particular, the prior art of record does not disclose assembling a instrumentation list from the simulation clients for a given HDL model of an electronic circuit and then downloading the instrumentation disable list for a HDL model from an instrumentation server to simulation client in a batch simulation farm. Further, the prior art of record does not teach selectively disabling instrumentation events by utilizing the instrumentation entity to detect occurrence of instrumentation event and delivering the signals to instrumentation logic, for that particular HDL model as now recited in the independent claims 1, 7, 13, and 19. (See: Specification Pg.95 Lines 19-24; Fig 8C-12B & Corresponding specification; Fig 16A-C).

The closest prior art uncovered during examination teaches certain limitations of the claimed invention as follows:

U.S. Patent 6,011,920 issued to Edwards: Edwards teaches disabling an instrumentation event as setting and clearing breakpoint among other functionalities (Edwards '920: Col.5, Lines 34-44) in a distributed system that has a host and a target (Edwards '920: Figure 2). The simulation client (target) communicates with the instrumentation server, also known as debug probe (Edwards '920: Abstract, Line 5) to process data with respect to model. Edwards teaches assembling an instrumentation event disable list within instrumentation server as application task list on the instrumentation server (Edwards '920: Abstract, Lines 11-12). Further,

Edwards teaches retrieving the application list from the instrumentation server, which passes the application name from the list to the microkernel loaders (Edwards '920: Col.2, Lines 34-42) to load and debug the application (Edwards '920: Col.2, Lines 45-51). Edwards '920 does not teach his network to provide instrumentation details for a simulating an HDL Model of a circuit design but is a generic approach to provide application level debugging. Further, The disable list on the Edwards '920 holds a list of application tasks to be debugged and not list of instrumentation event names that need to be disabled for a HDL model of a circuit design in a simulation.

U.S. Patent 6,336,087 issued to Burgun: Burgun '087 teaches disabling/tracking an instrumentation event in a simulation model where the simulation client communicates with an instrumentation server to process simulation data with respect to simulation model (Burgun '087: Figure 21). Burgun '087 suggests two approaches to instrumentation. First, using full hardware implementation of instrumentation logic with the gate level synthesis where instrumentation logic can be optimized (Burgun '087: Abstract Lines 1-4; Col.5, Lines 15-28, Figure 20 for optimization). This is a more hardware intensive approach, but faster. Second, an approach that cross-references the gate logic transition points during simulation to the lines in the RTL source code (Burgun '087: Col.5, Lines 30 –43). The instrumentation data file, used for cross-referencing, can be used for effectively setting breakpoints which can be acted upon in the RTL simulation (Burgun '087: Col.14, Lines 20-22, 26-28). The model suggested by the applicants is in between

the two approaches suggested by the Burgun '087 and uses the positive features of both approaches, implementing the instrumentation logic in hardware from first approach and creating a list of instrumentation events that need to be tracked from the second to better control the monitoring activity, although such a combination is already suggested by Burgun '087 (Burgun '087: Col.6, Lines 15-19). Burgun does not teach assembling the instrumentation list of the instrumentation events for a HDL model of a circuit design on the instrumentation server and then retrieving the instrumentation list before the simulation to the simulation client. Further, Burgun does not disclose the exact details of how the instrumentation event is disabled, because his two approaches are on the two extremes (completely hardware or completely software) and does not teach the intermediate approach of using instrumentation logic & entity.

Further, Burgun '087 and Edwards '920 both use the list from the instrumentation server to positively track the instrumentation events (i.e. debug an application, track instrumentation events during simulation as named on the instrumentation list). Neither Burgun '087 nor Edwards '920 separately or in combination use the instrumentation/debugging list in the inhibitive matter, associated to instrumentation logic, as disclosed by the claimed invention to disable the instrumentation events.

Remarks

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled **“Comments on Statement of Reasons for Allowance.”**

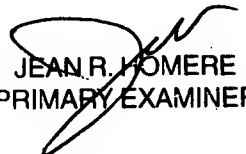
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 8:30 - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R. Homere can be reached on (571)272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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